

**AMENDMENTS TO THE DRAWINGS**

Two Replacement Sheets of formal drawing figures are attached following page 17 of this paper. The two replacement sheets contain formal drawings of the originally submitted Figures 1-3. No new matter has been introduced by the replacement sheets.

### **REMARKS / ARGUMENTS**

The present application includes pending claims 1-15, all of which have been rejected. By this Amendment, claims 1-15 have been amended, as set forth above, to further clarify the language used in these claims and to further prosecution of the present application. The Applicant respectfully submits that the claims define patentable subject matter.

Initially, the Applicant notes that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the *initial review* of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel *should* state *all* reasons and bases for rejecting claims in the *first* Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.

See Manual of Patent Examining Procedure (MPEP) § 2106(II). As such, the Applicant assumes, based on the goals of patent examination noted above, that the present Office Action has set forth "all reasons and bases" for rejecting the claims.

Claims 1-3, 5-8, 10-13 and 15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,850,493, issued to Ojard (hereinafter, Ojard). Claims 4, 9 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ojard in

view of U.S. Patent Publication No. 2003/0123586, issued to Yen (hereinafter, Yen). The Applicant respectfully traverses these rejections at least based on the following remarks.

## **REJECTION UNDER 35 U.S.C. § 102**

### **I. Ojard Does Not Anticipate Claims 1-3, 5-8, 10-13 and 15**

The Applicant first turns to the rejection of claims 1-3, 5-8, 10-13 and 15 under 35 U.S.C. 102(e) as being anticipated by Ojard. With regard to the anticipation rejections under 102(b), MPEP 2131 states that “[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” See Manual of Patent Examining Procedure (MPEP) at 2131 (internal citation omitted). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See *id.* (internal citation omitted).

#### **A. Rejection of Independent Claim 1 under 35 U.S.C. § 102 (e)**

With regard to the rejection of independent claim 1 under 35 U.S.C. § 102 (e), the Applicant submits that Ojard does not disclose or suggest at least the limitation of “removing post cursor inter-symbol interference within at least one error correction code word in a block code based error correction scheme,” as recited by the Applicant in independent claim 1.

The Office Action refers for support to Ojard and states the following:

As per claims 1, 6 and 11 Ojard et al teaches a method for equalization in a communications system, the method comprising: utilizing a block code (see fig.7 element 710) based error correction scheme in a modulation system (see fig.7 element 711) of the communication system (see col.15, lines 12-25); and *removing cursor intersymbol interference within an error code correction word to make code word decision with minimum error power-based criteria in the block code based error correction scheme (see col.14, lines 46-65).*

See the Office Action at page 2 (emphasis added). The Examiner seeks support in col.

14 of Ojard, which states the following in relevant portions:

In the preferred embodiment shown in FIG. 7, correction for intersymbol interference, a result of dispersion in the channel, is accomplished by a decision feedback equalizer comprising feed-forward equalizer 704 and feed-back equalizer (DFE) 705. In other embodiments, equalization may be accomplished by alternative methods including a decision feed-back equalizer having no feed-forward section or a linear equalizer having no feed-back section. The parameters of feed-forward equalizer 704 and feed-back equalizer 705 are adaptively chosen in adapter 712 in order that the removal of intersymbol interference by the equalizer is optimized. The equalizer outputs a corrected data signal. The corrected data signal is input to slicer 706 which 60 determines the decoded data symbol value based on the corrected data signal. Adapter 712 inputs the corrected data signal from the equalizer and the decoded data symbol from slicer 706 and adjusts the parameters of FFE 704 and DFE 705 to optimize the functioning of the equalizer.

See Ojard, col. 14, lines 46-65. Referring to Figure 7 of Ojard, there is disclosed a decision feedback equalization scheme that uses a feed-forward equalizer (704) and a feed-back equalizer (705). However, the Applicant points out that the network interface device disclosed by Ojard does not use error correction codes in the signal processing. More specifically, Ojard does not disclose or suggest a block code based error correction scheme, as recited in Applicant's claim 1. Furthermore, Ojard, including col.

14, lines 46-65, also does not disclose removing of post cursor inter-symbol interference within an error correction code word. Therefore, the Applicant maintains that Ojard does not disclose or suggest at least the limitation of "removing post cursor inter-symbol interference within at least one error correction code word in a block code based error correction scheme," as recited by the Applicant in independent claim 1.

Accordingly, independent claim 1 is not anticipated by Ojard and is allowable. Independent claims 6 and 11 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 6 and 11 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

**B. Rejection of Dependent Claims 2-3, 5, 7-8, 10, 12-13 and 15**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 102(e) as being anticipated by Ojard has been overcome and request that the rejection be withdrawn. Additionally, claims 2-3 and 5, 7-8 and 10, and 12-13 and 15 depend from independent claims 1, 6 and 11, respectively, and are, consequently, also respectfully submitted to be allowable.

Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-3, 5-8, 10-13 and 15.

### REJECTION UNDER 35 U.S.C. § 103

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure ("MPEP") states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

See MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination," and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a *suggestion or motivation in the reference* to do so'" (citing *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)). Moreover, MPEP § 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion..., citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

## **II. The Proposed Combination of Ojard and Yen Does Not Render Claims 4, 9, and 14 Unpatentable**

The Applicant now turns to the rejection of claims 4, 9, and 14 as being unpatentable over Ojard in view of Yen.

### **A. Rejection of Dependent Claims 4, 9 and 14**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 6 and 11 under 35 U.S.C. § 102(e) has been overcome and request that the rejection be withdrawn. Additionally, since the additional cited reference (Yen) does not overcome the deficiencies of Ojard, claims 4, 9, and 14 depend from independent claims 1, 6, and 11, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 4, 9, and 14.

## **III. New Claims 16-17**

The Applicant has entered new claims 16-17. Support for the new claims may be found in, at least, pages 3-8 of the specification. No new matter has been introduced by the new claims 16-17.

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Reply to Office Action of March 20, 2007

**CONCLUSION**

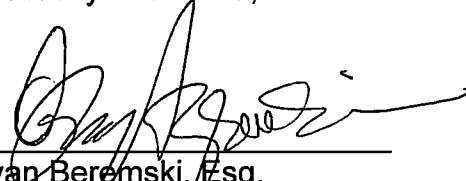
Based on at least the foregoing, the Applicant believes that all claims 1-17 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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